

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,321	07/30/2001	James S. Katz	Rachis/B	4464
24390 . 759	7590 07/22/2004		EXAMINER	
LUCASH, GESMER & UPDEGROVE, LLP			ANYA, CHARLES E	
40 BROAD ST SUITE 300	•			PAPER NUMBER
BOSTON, MA 02109		2126		
			DATE MAILED: 07/22/2004	i ·

Please find below and/or attached an Office communication concerning this application or proceeding.

4

	Application No.	Applicant(s)				
	09/918,321	KATZ ET AL.				
Office Action Summary	Examiner	Art Unit				
	Charles E Anya	2126				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period who Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 30 Ju	ily 2001.					
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowan	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-49</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.	Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-13,15-43,45,46,48 and 49</u> is/are reje	Claim(s) <u>1-13,15-43,45,46,48 and 49</u> is/are rejected.					
7)⊠ Claim(s) <u>44</u> is/are objected to.	Claim(s) <u>44</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers	,					
9) The specification is objected to by the Examiner	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau  * See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)  1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 6/27/04.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					
	tion Summary	Part of Paper No /Mail Date 7				

Art Unit: 2126

#### **DETAILED ACTION**

1. Claims 1-49 are pending in this application.

### Claim Objections

2. Claims 17,18,21,22 and 47 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim --may refer in the alternative to only one set of claims--. See MPEP § 608.01(n).

# Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. Claim 35 recites the limitation "the first source" in line 2. There is insufficient antecedent basis for this limitation in the claim.

For the purpose of this office action the examiner change the phrase "the first source" to "a first source".

Art Unit: 2126

### Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1,2,4-25,35-41 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,714,992 B1 to Kanojia et al. in view of U.S. Pat. No. 6,009,480 to Pleso.
- 8. As to claim 1, Kanojia teaches a method of responding to device events generated by a peripheral device (Col. 2 Ln. 43 67, figure 7 Col. 16 Ln. 50 67), the method comprising: detecting a device event generated by the peripheral device when the peripheral device is in communication with a client system, wherein the event is generated at any of peripheral device detection time, during device operation, at device power-up, power-down or disconnect, or at client system power-up (Col. 2 Ln. 43 67, figure 7 Col. 16 Ln. 50 67, Col. 14 Ln. 1 8), transmitting from the client system to a first source of software or data, in response to detection of the device event (Col. 2 Ln. 54 60, Col. 16 Ln. 50 56, Step 1004 Col. 17 Ln. 1 4), a request to obtain software or data from the first source, and receiving the software or data from the first source, the software or data having been selected to be appropriate for the peripheral device in response to the event generated by the peripheral device (Step 1004/Step 1006 Col. 17

Art Unit: 2126

Ln. 1 – 14), wherein the steps of detecting, transmitting and receiving are performed automatically when a device event is detected, without intervention by a user of the peripheral device, and can be executed even when the client system contains no device driver to support the peripheral device (Col. 2 Ln. 17 - 27, figure 7 Col. 16 Ln. 57 - 67).

- 9. Although Kanoji teaches wherein the steps of detecting, transmitting and receiving are performed automatically when a device event is detected, without intervention by a user of the peripheral device, Pleso explicitly teaches this limitation (Col. 2 Ln. 54 65).
- 10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pleso and Kanojia because the teaching of Pleso would improve the system of Kanojia by eliminating user manual download of drivers/software (Pleso Col. 2 Ln. 31 35).
- 11. As to claim 2, Kanojia teaches the method of claim 1 wherein the event is generated upon user interaction with the peripheral device (Col. 14 Ln. 1 8).
- 12. As to claim 4, Kanojia teaches the method of claim 1 wherein receiving the software or data from the first source includes receiving from the first source a package containing any of data, script files or software to enable a response to the detected device event (Step 1004-1012 Col. 17 Ln. 1-24).

- 13. As to claim 5, Kanojia teaches the method of claim 4 further including: enabling a sequence of responses to the detected device event, the sequence of responses being defined by the data or software in the package (figure 7 Col. 16 Ln. 57 67, Col. 17 Ln. 1 24).
- 14. As to claim 6, Kanojia teaches the method of claim 5 wherein the sequence of responses includes initiating a software program or otherwise activating specified software (figure 7 Col. 16 Ln. 57 67, Col. 17 Ln. 1 24).
- 15. As to claim 7, Kanojia teaches a method of responding to events generated by a peripheral device in communication with a client system, comprising: detecting an event generated by the peripheral device (Col. 2 Ln. 43 53, figure 7 Col. 16 Ln. 50 67), and responding to the event generated by the peripheral device, by executing a corresponding function, without intervention by the user of the client system (Col. 2 Ln. 22 26, 54 60, Steps 1002 1014 Col. 16 Ln. 65 67, Col. 17 Ln. 1 28).
- 16. Although Kanojia teaches responding to the event generated by the peripheral device, by executing a corresponding function, without intervention by the user of the client system, Pleso teaches this limitation (Col. 2 Ln. 54 65).
- 17. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Pleso and Kanojia because the teaching of Pleso would improve the system of Kanojia by eliminating user manual download of drivers/software (Pleso Col. 2 Ln. 31 35).

- 18. As to claim 8, Kanojia teaches the method of claim 7 wherein the function is defined on the basis of either the event or the peripheral device (figure 7 Col. 16 Ln. 50 − 67).
- 19. As to claim 9, Kanojia teaches the method of claim 7 wherein the event is generated upon connection of the peripheral device to a client process in system (Col. 14 Ln. 1 8).
- 20. As to claim 10, Kanojia teaches the method of claim 7 wherein the event is generated upon disconnection of the peripheral device from a client processing system (Col. 3 Ln. 6 17, figure 8 Col. 17 Ln. 29 43).
- 21. As to claim 11, Kanojia teaches the method of claim 7 wherein the event is generated during peripheral device operation (Col. 14 Ln. 1 8, Col. 3 Ln. 6 17, figure 8 Col. 17 Ln. 29 43).
- 22. As to claim 12, Kanojia teaches the method of claim 7 wherein the event is generated at peripheral device power-up (Col. 14 Ln. 1 8).
- 23. As to claim 13, Kanojia teaches the method of claim 7 wherein the function includes navigation to a web site Col. 2 Ln. 61 67, Step 1010 Col. 17 Ln. 15 22).

- 24. As to claim 14, Kanojia teaches the method of claim 7 wherein the function includes navigating to a predetermined web page when no other response to a given event is defined (Col. 6 Ln. 22 27).
- 25. As to claim 15, Kanojia teaches the method of claim 7 wherein the function includes initiation of an e-commerce transaction (figure 4A Col. 11 Ln. 50 54, Step 3 Col. 12 Ln. 9 13).
- 26. As to claim 16, Kanojia teaches the method of claim 7 further including: detecting changes in one or more peripheral devices during operation of the peripheral devices by detecting events generated by the peripheral devices, and dynamically responding to the detected changes to manage new devices or events (Col. 2 Ln. 22 27, figure 7 Col. 16 Ln. 57 67).
- 27. As to claim 17, Kanojia teaches the method of claim 7 wherein the client system supports peripheral devices attached to the client system either before or after powering-up the client system, even when no supporting device driver currently exists on the client system at the time the device is attached to the client system (Col. 2 Ln. 43 -53, Col. 14 Ln. 1 -8).

- 28. As to claim 18, Kanojia teaches the method of claim 7 wherein the detecting step includes the step of detecting events generated on a bus in communication with the client system (figure 7 Col. 16 Ln. 56 67).
- 29. As to claim 19, Kanojia teaches the method of claim 18 wherein the bus operates in accordance with a predefined bus protocol (figure 7 Col. 16 Ln. 56 67).
- 30. As to claim 20, Kanojia teaches the method of claim 19 wherein the bus protocol is USB or IEEE-1394 (figure 7 Col. 16 Ln. 56 67).
- 31. As to claim 21, Kanojia teaches the method of claims 7 further including: detecting events originating on a wireless network in communication with the client system (figure 1D Col. 5 Ln. 66 67, Col. 1 7).
- 32. As to claim 22, Kanojia teaches the method of claim 7 further including: responding to events originating on a home network operating in accordance with a home network standard (figure 1A-1D).
- 33. As to claim 23, although Kanojia is silent with reference to the method of claim 22 wherein the home network standard is the American National Standards Institute (ANSI) home network standard, this limitation is inherent since the download requests are via C++ method calls which is ANSI compliant.

- 34. As to claim 24, Kanojia teaches the method of claim 7 further including: upon detection of an event associated with a device or device class represented in a list of event classes, initiating a response to the event, wherein the response is among a list of possible responses to events specified in the list of event classes, for each of a set of devices or devices classes (Col. 14 Ln. 1 – 16).
- 35. As to claim 25, Kanojia teaches the method of claim 24 further including: associating, with a given device, a list of possible sequences of responses to events in each event class, and wherein the step of initiating a response includes the step of initiating a sequence of responses (Col. 14 Ln. 17 - 25).
- 36. As to claim 35, see the rejection of claim 14.
- 37. As to claim 36, Kanojia teaches the method of claim 7 further including: permitting device-driver-originated events to initiate interaction with a user of the peripheral device via a user interface (Col. 6 Ln. 21 – 35).
- 38. As to claim 37, Kanojia teaches the method of claim 36 further including: permitting the user, following initiation of interaction to control the peripheral device through the user interface (Col. 6 Ln. 21 – 35).

- 39. As to claim 38, Kanojia teaches the method of claim 7 further including: utilizing a standard format to define browser navigation directives (Col. 8 Ln. 23 34).
- 40. As to claim 39, Kanojia teaches the method of claim 7 further including: utilizing a standard format to define or initiate device events (Col. 8 Ln. 23 34).
- 41. As to claim 40, Kanojia teaches the method of claim 7 further including: utilizing a standard format to communicate device event-specific data (Col. 8 Ln. 28 41).
- 42. As to claim 41, Kanojia teaches the method of claim 7 further including: utilizing a standard format to communicate runtime data (Col. 8 Ln. 28 41, "...dynamically..." figure 7 Col. 16 Ln. 57 67).
- 43. As to claim 48, Kanojia teaches the method of claim 1, wherein the client system is in communication with the first source via the World Wide Web or Internet (figures 1A-1D).
- 44. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,714,992 B1 to Kanojia et al. in view of U.S. Pat. No. 6,009,480 to Pleso as applied to claim 2 above, and further in view of U.S. Pat. No. 5,548,759 A to Lipe.

Art Unit: 2126

45. As to claim 3, Kanojia as modified by Pleso is silent with reference to the method of claim 2 wherein the event can include actuating a peripheral device START button.

- 46. Lipe teaches the method of claim 2 wherein the event can include actuating a peripheral device START button (Col. 21 Ln. 1 12).
- 47. It would have been obvious to one of ordinary skill in the art the time the invention was made to combine the teachings of Lipe, Kanojia and Pleso because the teaching of Lipe would improve the system of Kanojia and Pleso by user software installer means (Lipe Col. 21 Ln. 1 12).
- 48. Claims 26 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,714,992 B1 to Kanojia et al. in view of U.S. Pat. No. 6,009,480 to Pleso as applied to claim 25 above, and further in view of U.S. Pat. No. 6,496,893 B1 to Arai.
- 49. As to claim 26, Kanojia as modified by Pleso is silent with reference to the method of claim 25 wherein the list is extensible (Col. 7 Ln. 9 46, Col. 14 Ln. 33 52).
- 50. Arai teaches the method of claim 25 wherein the list is extensible.
- 51. It would have been obvious to one of ordinary skill in the art at the time the invention made combine the teachings of Arai, Kanojia and Pleso because the teaching of Arai would improve the system of Kanoija and Pleso by providing the functionality of adding new devices (Arai Col. 14 Ln. 33 52).

- 52. As to claim 27, Arai teaches the method of claim 25 wherein the associating includes: storing a list of devices and device events that can be extended without modification to base client system software (Col. 7 Ln. 8 19).
- 53. As to claim 28, Arai teaches the method of claim 25 further including: responding to detection of event type and device not previously encountered or supported by the system (Col. 14 Ln. 33 37).
- 54. As to claim 29, Arai teaches the method of claim 28 wherein the storing includes: storing, in a first source, at least one extensible set of mapping of event types and corresponding responses, including and extensible list of event types and responses not previously encountered or supported by the client system (Col. 13 Ln. 27 57,Col. 14 Ln. 33 37).
- 55. As to claim 30, Arai teaches the method of claim 28 further including: detecting a new event type not previously encountered or supported by the client system and opening a communications channel with the first source to obtain a package of software or data specifying a response to the new type (Col. 13 Ln. 27 57,Col. 14 Ln. 33 37).
- 56. As to claim 31, Arai teaches the method of claim 30 wherein the step of responding to peripheral devices is defined by a package resident on the client, or on the first source (Col. 13 Ln. 27 57,Col. 14 Ln. 33 52).

- 57. As to claim 32, Arai teaches the method of claim 31 wherein the package can be resident in client system or obtained form the first source after detection of the device event (Col. 14 Ln. 8 19, Col. 14 Ln. 33 52).
- 58. As to claim 33, Arai teaches the method of claim 28 wherein the responding includes: detecting a device type for the device (Col. 13 Ln. 27 57, Col. 14 Ln. 33 52).
- 59. As to claim 34, Arai teaches the method of claim 33 further including: responding to newly encountered, unsupported devices, responsive to detected device type Col. 13 Ln. 27 57, Col. 14 Ln. 33 52).
- 60. Claims 42,43,45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,714,992 B1 to Kanojia et al. in view of U.S. Pat. No. 6,009,480 to Pleso as applied to claim 7 above, and further in view of U.S. Pat. No. 6,74,807 B1 to Mathur et al.
- 61. As to claim 42, Kanojia is silent with reference to the method of claim 7 further including: permitting third parties to implement, in software, specific responses to device events, wherein the specific responses to device events can include device events not previously encountered by the system.

- 62. Mathur teaches the method of claim 7 further including: permitting third parties to implement, in software, specific responses to device events, wherein the specific responses to device events can include device events not previously encountered by the system (Col. 9 Ln. 48 67).
- 63. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Mathur, Kanojia and Pleso because the teaching of Mathur would improve the system of Kanojia by providing appropriate driver for newly installed device (Mathur Col. 9 Ln. 59 65).
- 64. As to claim 43, Mathur teaches the method of claim 42 wherein enabling third parties to implement specific responses to device events includes: establishing a common interface definition for use by third parties (Device Manager Module 210 Col. 9 Ln. 49 67, Col. 10 Ln. 1 16).
- 65. As to claim 45, Kanojia teaches the method of claim 43 wherein specific response implementations are defined to the client system using a standard format (Col. 8 Ln. 27 34).
- 66. As to claim 46, Kanojia teaches the method of claim 45 wherein the standard format is World Wide Web Consortium (W3C) XML (Col. 8 Ln. 27 34).

- 67. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,714,992 B1 to Kanojia et al. in view of U.S. Pat. No. 6,009,480 to Pleso as applied to claim 7 above, and further in view of U.S. Pat. No. 6,658,586 B1 to Levi et al.
- 68. As to claim 47, Kanojia as modified Pleso is silent with reference to the method of claim 7, wherein a device-driver-originated event is printer out-of-ink.
- 69. Levi teaches the method of claim 7, wherein a device-driver-originated event is printer out-of-ink (Col. 4 Ln. 1 39).
- 70. It would have been obvious to one of ordinary skill in the art at the time the invention was made combine the teachings of Levi, Kanojia and Pleso because the teaching of Levi the system of Kanojia by monitoring the status or health of a device (Levi Col.  $4 \, \text{Ln.} \, 13 15$ ).
- 71. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,714,992 B1 to Kanojia et al. in view of U.S. Pat. No. 6,009,480 to Pleso as applied to claim 1 above, and further in view of U.S. Pat. No. 5,951,639 to MacInnis
- 72. As to claim 49, Kanojia is silent with reference to the method of claim 1, wherein the first source includes a broadcast carousel.

Art Unit: 2126

73. MacInnis teaches the method of claim 1, wherein the first source includes a broadcast carousel (Col. 2 Ln. 39 – 42).

74. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of MacInnis, Kanojia and Pleso because the system of MacInnis would improve the system of Kanojia by providing continuous broadcast of various version of modules in a loop (MacInnis Col. 2 Ln. 39 - 42).

### Allowable Subject Matter

75. Claim 44 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E Anya whose telephone number is (703) 305-3411. The examiner can normally be reached on M-F (8:30-6:00) First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng-Ai can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2126

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles E Anya Examiner Art Unit 2126

cea.

ST. JOHN COURTENAY !!!
PRIMARY EXAMINER